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A

Treatise

on

Dyspepsia.

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From the important function which the stomach performs in the animal oeconomy, and from its being an organ so essential to life, a consideration of the causes which tend to produce a derangement of its operations must necessarily constitute a subject highly interesting to medical science. As it is upon the healthy operations of this viscus more than upon any other in the system, that man is indebted for much of the pleasure & happiness which he enjoys in this life; so all must admit the importance, & perceive the necessity of an investigation of its disorders, that their existence may be readily known & distinguished & that our exertions or attempts to remedy or relieve them, may be conducted upon just & scientific principles. From the intimate connexion which exists between the stomach & every other part of the body by means of blood vessels & nerves & from its preeminent sympathy over them all, it is rendered liable to disease from a greater variety of causes, than any other part of the human fabric. The various morbid affections which occasionally exist in this organ, are not intended to be investigated or considered in this essay. But the nature of that disease, which has been called by Nosologist, Dyspepsia, with the means best adapted to remedy or relieve it, will more particularly constitute the subject of the subsequent observations. As my design is to give merely a brief history of the disease, my own ideas, together with such as I have acquired from Authors who have written on the subject, will be condensed as much as is any how compatible with clearness & perspicuity. Having delivered these preliminary remarks,

I will now proceed with the more particular consideration of the sub-ject before me.

The first circumstance which arrests our attention in viewing the phenomena of this disease & which solicits investigation, is the "pars in qua" of morbid excitement. Upon this point several opinions have been entertained. Some have supposed it to be seated almost exclusively in the muscular fibres of the stomach, others placed it in the nervous coat, while a few have maintained its existence to be principally in the blood-vessels, villous coat &c. Without adopting either of these opinions, I am induced to believe, that in every case of well marked dyspepsia morbid excitement is present in all the parts appertaining to the stomach, though the degree of this excitement, is no doubt, often very different in each of them. I take this opinion to be well founded, from the phenomena exhibited by the disease. Thus, do not the irritability, torpor, morbid sympathies & morbid secretions, together with the irregularity in the pulse, all indicate the existence of morbid & irregular action in the several parts named above? The intimate connexion which exists between the several parts of the stomach, & the known influence of sympathy in every part of the body, but more particularly in these organs, give additional assistance in confirmation of the truth of the opinion. As the shortness of my time precludes the possibility of collecting & arranging the various arguments & facts that might be adduced in its favour; I shall for the present consider it as established, & will go on to enumerate the causes which induce it. And first of the remote causes.

These may be divided into direct & indirect, or such as act immediately upon the stomach itself & such as act through the

medium of the system in inducing debility in this viscus. To the first order of Causes belong. 1st Improper diet. 2d Excess in Eating. 3d Improper use of narcotic substances as opium, tobacco &c. 4th Frequent vomiting, whether naturally occurring or artificially excited. 5th The too frequent use of sugar, acids & other crude substances. Of the second order of causes. These are 1st The severe attack of an acute disease. 2d An indolent or sedentary life. 3d Excessive indulgence of the venereal desires. 4th The constant application of the mind to study or business of any kind. 5th Frequent indulgence of the angry passions, as hatred, anger, jealousy, revenge, as also the sedative passions of fear, grief & despair; to which may be not add the divine & tender passion of love? 6th Exposure to cold & moist air without exercise. The seperate or combined action of these causes upon the stomach, produce in it debility, which forms its predispo=sing cause to disease

Among the exciting causes I may enumerate, heat, cold, distension, abstinence, &c; and indeed any of the usual causes may become the exciting cause. These causes acting upon an accumulated excitability, which is the effect or consequence of debility produce the proximat cause or morbus ipse. This is characteri=zed by the following symptoms. These I shall divide into primary & secondary, or such as appear in the chylopoietic viscera & such as appear in other parts of the body from sympathy. To the first belongs acidity, heat in the stomach, acrid eructations, eructation of other watery fluid, frequent vomiting, flatulence, a rancid state of the alimentary matter, spasms in the intestines, cholic, obstinate costive=ness or alternation of costiveness & diarrhoea, borborygmi & the passage of the food through the intestines without it, undergoing

alteration

2d. Of such symptoms as occur in other parts of the body. These are vertigo, furred tongue, this is particularly observable in the morning & is an unerring criterion of a disordered state of the digestive organs, swimming in the head, dimness of sight, pains in the balls of the eyes, headache, an early & rapid decay of the teeth, sallow complexion, pain in the epigastric region, this however is often absent even in advanced stages of the disease; pulmonary consumption, shifting pains, tremors in the hands, small cutaneous pustular eruptions particularly about the wrists & thighs, flushings affecting the whole body or particular part of it, shiverings, palpitation of the heart, syncope, cold feet, pulse irregular, quick, feeble & intermitting, sometimes no evident perspiration from the most violent exercise at other times copious sweat from moderate exercise, liability to be affected by changes in the weather, great drowsiness, irregular & interrupted sleep & great watchfulness. Of the symptoms which particularly appear in the mind. These are great irritability, habitual discouragement, low spirits, timidity, anxiety, irresolution, fickleness, fretfulness, taciturnity, sadness, imperfect memory, strange whims, proneness to reverie, frequent strange & incoherent dreams & lastly settled melancholy. These are all the symptoms which I have seen, or which I have observed mentioned by such authors as I have read on the subject. There is perhaps no case in which all these occur, yet in severe cases of long continuance, I have no doubt but that most of them are present at some period of the disease.

An ulcer or scheirrus of the stomach may sometimes be confounded with dyspepsia; but the former may always be distinguished from the latter, by the continuance of the pain in ulcer or scheirrus without any exception, & from the patient's experiencing no relief from such

The seat, causes & symptoms of dyspepsia having now been stated, I come next to consider the treatment proper to remedy or relieve it.

Here the first thing indicated, is the removal of the remote & exciting causes. The necessity of this indication is sufficiently obvious; as the danger & difficulty of effecting a cure in this, as almost in every other disease, are always increased, as the causes which induced it are allowed to continue their operation. The physician should therefore impress upon the mind of his patient, the absolute necessity of attending to this indication, as a compliance with it, is of the most essential importance to the successful management of dyspepsia. But to persuade patients to renounce such habits as they have often indulged in with impunity, is a task which is sometimes very difficult to accomplish. As the advantage to be gained by the practitioner, in engaging the cooperation of the patient, is of such immense importance, he should consider the attainment of it as constituting "dimidium operi". Having done this, he is next to remove such symptoms as more especially continue to increase & aggravate the disease. The first of these is acidity in the stomach. This is one of the most painful and distressing symptoms of the disease, & is itself a source of many others as a gnawing sensation in the stomach, a sensation of emptiness, irregular appetite, flatulency, cholic, costiveness, headach, acrid eructation, low spirits, to which I may add all the other affections of the mind as also some other of the chylopoetic viscera. To effect the removal of this symptom two things are to be done. The first is to remove it from the stomach when it gets there in such quantity as to become troublesome; the next is to prevent its regeneration. The remedies proper in the first case are the alkalies & alkaline earths. One of the most effectual

and proper for this purpose is the artificial soda water, but as this remedy cannot always be conveniently had, the carbonate of potash or soda may be used as substitutes. As the long continued use of these has the effect of debilitating the stomach, I would recommend that their use be occasionally alternated with magnesia, lime water & a combination of Rheubarb with columbo. The combination of the two last articles is a very useful remedy. It has the effect of carrying off the acid & at the same time gently stimulates the stomach. Emetics of the mild kind will sometimes be found useful for this purpose. To prevent its reproduction after it is removed is however, an object of much greater importance and is equally difficult of attainment. The manner in which this acid is produced has not as yet been satisfactorily explained. That it is sometimes the product of an acetous fermentation in the stomach, is not disputed I believe by any; but it frequently appears, particularly in old & violent cases of the disease, under circumstances in which this process could not have taken place. An explanation of its production under such circumstances has been attempted by Dr. Dwight, who has written a very excellent paper on this subject. He supposes it to be the effect of morbid secretion of the gastric liquor. As I am in part disposed to adopt his opinion, I will enumerate some of the arguments which he adduces in support of it. He appears to think that in all cases of acidity from fermentation, there is always an extrication of gas or wind more or less evident. But that there often exists a sharp & corrosive acid without being accompanied with wind, & that this often continues weeks, months & even years without material abatement, & this notwithstanding every regulation of diet to counteract it. From its frequently occurring when there is no fermenting matter present in the stomach & from the effect which severe study has in producing it, as also violent passions, he supposes that it cannot

possibly be owing to fermentation. The cause which has been thus assigned he observes does not appear adequate to the production of evils so suddenly induced and attended with such distressing consequences. As it would occupy too much time to relate the various facts which he has advanced in support of his theory, I must refer those who may wish to become more particularly acquainted with the subject, to the original paper, published in the "Memoirs of the Connecticut Academy of Arts & Sciences."

Whatever be the source of its production, whether it be from fermentation, a morbid secretion of the gastric juices, or a decomposition of this fluid, they all point out the necessity of an attention to diet, as a means of preventing it. That the quantity & quality of this acid is much influenced by the aliment employed, is a fact so well known to medical men as to render any farther elucidation of it superfluous. As the limits of this essay preclude a particular account of the various articles employed as aliments, I shall therefore merely give a general view of such articles, as are usually considered as proper for persons labouring under dyspeptic symptoms. These are beef, mutton, & all other animal food of loose texture; eggs, milk, potatoes, & rice to which I may add all the farinaceous vegetables. There are two articles, which are in such general use, among all classes of society & the deleterious effects of which are so little attended to, that I cannot pass them by in this place. These are tea & coffee; to the liberal use of these substances, more than to any other which constitute a part of the diet of man, I think we may properly ascribe the many severest obstinate cases of dyspepsia which are now so frequently to be met with in almost every situation of life. Their employment should therefore be strictly forbidden to all persons, who are in any manner predisposed to diseases of the digestive organs. The quantity of food

to be taken at one time, should also be attended to. The patient should never take more than the powers of the stomach are perfectly adequate to manage. By attending to this direction, the prejudicial effects that might otherwise arise from undigested matter remaining in the stomach or intestines may be completely avoided. The time of taking food should be regulated almost exclusively by the appetite; whenever an inclination is manifested for food it should always be indulged. It should never be allowed to continue empty, as by this means the debility which it is our object to relieve would be thereby greatly increased. On the subject of drinks, it is proper that I should make some remarks. Here without hesitation I recommend the propriety of using water. No fluid that has yet been discovered, has so powerful an effect in promoting the process of digestion, or of producing that tranquility & regularity throughout the system so essential to the full enjoyment of life as this. Though it be possessed of such invaluable virtues, yet there are cases where it, use would be highly prejudicial. This in a very torpid or indolent state of the stomach, water used alone as a drink would aggravate, rather than remedy the evil. In such cases also where the patient has previous to being attacked with a disorder of the digestive organs, been in the habit of using wine, brandy or any other kind of ardent spirits at his meals, it would be highly injurious suddenly to substitute water in their place. For the stomach is an highly irritable organ, & where it has been long accustomed to a stimulus of any kind, if it be suddenly withdrawn, it becomes highly turbulent & restless, and if not allayed by a gratification of its wants it will produce tumult & commotion throughout the system. To such persons therefore as have been in the practice of using strong & stimulating drinks with their meals, I would recommend that the quantity of these should be gradually diminished, until they might

I have thus given an outline of the system of diet usually directed for persons labouring under diseases of the digestive organs. As there exists so great a difference in the powers of the digestive organs of different individuals, & as there are so many peculiarities & idiosyncracies to be met with in different persons, & even in the same person in health & in disease, I think it scarcely probable, that any system of diet can be proposed, that will be wholly suited to every case of morbid derangement of the stomach. From this circumstance & from the influence of habit & inclination in regulating the action of the stomach, I would suggest the propriety of letting the patient establish his own systema alimentarium. If he possesses discretion & is anxious to obtain relief, he will certainly be able to acquire a more correct knowledge of the powers of his stomach in the management of different articles of food & to point out the effects arising therefrom, than any physician whatever be his skill or judgement. I would by no means however exclude the cooperation of the judgement of the physician; for the successful issue of most cases of this kind depends very much upon their reciprocal exertions.

Another of the symptoms which requires to be immediately relieved is costiveness. This symptom very commonly occurs in dyspepsia & is sometimes of long duration. To remove it mild purgatives should be employed. The most proper for this purpose are rhubarb & magnesia. They should be given in such doses, as merely to excite the action of the bowels to such a degree, as will produce one or two evacuations in the twenty four hours. This being generally the natural operation of these parts when in health. The time most proper for their administration is just before going to bed. When given at this time their operation is not liable to interruption, & they generally produce their effect at that period in the morning, at which the bowels are usually evacuated when in health. It is highly important then to assist the powers of

Wind in the stomach & intestines. This is often a very troublesome & painful symptom. As it appears to be mostly the effect of fermentation all those substances should be strictly guarded against which would be likely to produce this process. It may generally be removed when it is present, by the use of Alkaline medicines & if it be accompanied with heartburn a few drops of the oil of peppermint or of anise dropped on a lump of loaf sugar & eaten will generally be found to give almost instaneous relief.

Diarrhœa, this generally arises from a large quantity of acid being present in the stomach. The remedies proper to remove it are the cretaceous julep, Magnesia & opium taken in small doses. The eating large quantities of unripe fruits or even of such as are ripe, is often apt to produce this symptom; they should therefore be always forbidden.

Having stated the directions which are proper for the removal of urgent symptoms, I come next to consider the best means of restoring the strength of the stomach. This is to be effected by medicines ~~that~~ which have a direct operation upon the stomach & by such as strengthen this organ through the medium of the system. The mineral acids have often been found very useful as tonic medicines. Great care however should be observed in their use, as they are liable to produce very serious effects to the teeth. The rubigo ferri will sometimes prove very useful in removing debility of the stomach, but its virtues in this respect will be greatly increased by combining it with columba, gentian or the peruvian bark. Quassia in infusion, has in many cases produced the happiest effects in increasing the tone of the stomach, & in this way greatly facilitates the process of digestion. This one of the most valuable medicines belonging to the class of tonics, & should therefore always be tried in every case of dyspepsia, where such medicines are indica-

A number of other articles belonging to the class of tonics, have at different times & by different physicians been occasionally employed with advantage in dyspepsia; but as none of these, as far as I am acquainted, have acquired any reputation for this purpose, I deem an enumeration of them unnecessary.

In cases of dyspepsia, where there are symptoms of an affection of the liver, and such cases I believe are not unfrequent; mercury employed in some of its forms, in such quantity as merely to touch the gums, has often proved a most invaluable remedy. And in old & obstinate cases, where every other remedy had failed, I have known mercury to have been used with the effect of producing permanent relief. In such cases it should be given in small doses, & persevered in for a considerable time. I might perhaps feel a delicacy in urging the employment of this medicine, had not the high authority of D. Rush, D. Hooper & Mr. Abernethy all of whom bear the strongest testimony of its efficacy in relieving diseases of the digestive organs. Which of the preparations of mercury is best suited for this purpose, I am unable to determine. The preparation which I have seen employed with so much advantage, was calomel in combination with rhubarb & opium. It was generally taken just before the patient went to bed & always had the effect of producing a regular evacuation of the bowels one in the twenty four hours.

The cases where the employment of this remedy is more particularly indicated, are all such as exhibit symptoms of a diseased liver or pancreas, or where the disease has continued for a considerable length of time & where the torpor of the part, require some powerful alterative. What would be ~~the propriety~~ the propriety of the employment in more recent cases of the disease is a question which I am wholly unprepared to answer & am disposed to believe however that it would be prejudicial.

Another remedy which I would recommend is blood letting. To Dr. Rush I believe we are indebted for the discovery of this remedy. From the beneficial effects which he has derived from its employment, & from the success which has attended its use, by other practitioners, I am inclined to believe, that the lancet will in skillful hands, become one of the most powerful instruments that has yet been discovered in subduing this perverse and obstinate disease. The state of the pulse has still continued to be too much overlooked by practitioners in their treatment of this disease. From the irregularity & sometimes tension of the pulse in diseases of the digestive organs, I am disposed to suspect that there sometimes exists a congestion in the vessels of the stomach. And may not such congestion have existed in those cases, where blood-letting proved so highly successful? This question solicits a reply from those who have witnessed the cases, in which the lancet was used.

I come in the last place to speak of the importance of exercise in removing debility & of increasing the strength & tone of the system. As the state of the mind has such a powerful influence over the operation of the body, & as it is in general so materially affected in this disease, an attention to the means of counteracting its baneful effects, naturally suggests itself in this place. For as the poet Armstrong has very aptly observed "To please the fancy is no trifling good,"

"Where health is studied; for whatever moves"
"The mind with calm delight, promotes the just"
"And natural movements of the harmonious frame."

To dissipate the gloom which usually over cast the mind in this disease, cheerful society should be recommended, where the mind might be pleasantly amused without becoming tired or fatigued. Travelling through romantic or well cultivated countries

will by presenting to the mind a succession of new & interesting objects, have the happiest effect in diverting it from the melancholy thoughts in which it is prone to indulge, & by the exercise with which it is accompanied, will impart strength & vigour to the system. To obtain however the greatest possible benefit from travelling the dyspeptic should procure an intelligent & pleasant companion. Where this is too expensive or where it cannot be conveniently undertaken riding on a tolerable hard trotting horse for several miles every day, will frequently be found very serviceable.

A sea voyage has been recommended & in some cases it is said to have been attended with the happiest effects. Of this mode of exercise however I must observe that I do not entertain a very favourable opinion. Because the exercise of the body is in this case merely passive & the mind from having little to occupy it would naturally be inclined to dwell upon the disease & by this means aggravate instead of alleviating its symptoms. Another objection of greater force is the costiveness which usually attends most persons when at sea.

When convenient, cultivating a small garden will be found a very agreeable way of taking exercise. If the patient can become so much engaged, or to feel ~~[illegible]~~ interested in the success of his labours, I am persuaded that it would prove one of the most powerful means that has been yet suggested in removing chronic debility of the stomach. Walking pretty briskly for a mile or two every day, is in some cases very useful. Cutting, sawing or splitting wood is a very excellent way of exercising the body. In cases where from the badness of the weather or other causes the patient cannot take exercise in the open air, there is a play called battle

door, that affords a very pleasant exercise, and is to be particularly recommended from its exciting a little interest & solicitude in the mind, without producing any demoralising effect. The manner in which this is played is so familiarly known to most persons, as to render any description unnecessary. There are a great many other modes of taking exercise which may be resorted to with advantage, which have not been here noticed, & which may be found described by different authors.

In employing exercise of any kind, care should be taken, never to carry it to the extent of inducing fatigue, it should likewise never be used when the stomach is empty, as prejudicial effects would thereby be induced. Whatever be the mode of exercise, the patient should always be attentive in keeping the feet warm & dry. The time most proper for taking exercise, is about two hours after taking breakfast & about the same time after dinner.

With this I conclude the subject, being fully aware that a great deal more might be said upon the nature & treatment of this disease which has not been noticed in this essay. As the fluctuating state of my health has prevented me from investigating the nature of this disease so extensively, as I could have wished, or of arranging what I had collected on the subject in the system & order that was intended, I submit the essay with all its crudities & imperfections, relying much upon the candour & liberality of those by whom it is to be judged.